PTO/SB/08A (10-96)

Please type a plus sign (+) inside this box

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE +

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for	form 1449	AVPTO							<u>Co</u>	Complete if Known		
I	NFO	RMAT	ION I	DIS	CLO	SURE		Appl	ication Number	10/4	06,546	
S	STAT	EMEN	T BY	AP	PLI	CANT		Filin	g Date			
								First	Named Inventor	Bin Lu		
		(us	se as many sl	heets as i	necessary)	• .	Grou	p Art Unit	-	· · · · · · · · · · · · · · · · · · ·	
•	• •					· ·.		Exan	niner Name	; · · · ·	· · · · · · · · · · · · · · · · · · ·	
Sheet		2	of	4				Attor	ney Docket Number	SEAG	63332	
······································			·					· · · · · · · · · · · · · · · · · · ·		******		
· ·	T 6:	I dia n	<u> </u>				<u>TENT DOCU</u>			1	<u> </u>	
Examiner Initials	Cite No.	U.S. Patent	Document	-:			atentee or Applica ted Document	int	Date of Publication of Cited Document MM-DD-YYYY		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
· · · · · · · · · · · · · · · · · · ·		Number	· · ·		Code ²	<u> </u>		:				
HK		Publica 2001/00	tion No. 033949		•	Abarra et al.	· · · · · · · · · · · · · · · · · · ·		10-25-2001			
		Publica 2002/00	tion No. 009620			Hanawa et a	ì.		01-24-2002			
		Publica 2002/00	tion No. 064691			Kanbe et al.			05-30-2002			
		Publica 2002/00	tion No.)68199			Futamoto e	al.		06-06-2002			
		Publica 2002/01	tion No. 132139			Chang et al.			09-19-2002		······································	
			tion No.			Oikawa et al	l,		09-26-2002			
M		Publica 2003/00	-			Shimizu et a	1.	-	01-23-2003			
					·· · · · · · · · · · · · · · · · · · ·					 -		
	· · · · · · · · · · · · · · · · · · ·	- · · · ·		<u></u>		FOREIGN	PATENT DOC	UMENTS	T			
1										Pages, Co	olumns, Lines.	

Examiner Initials	Citc	F	Foreign Patent De	ocument	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	76
		Office	Number ⁴	Kind Code ⁵ (if known)			· Baros vippon	
		· · · · · · · · · · · · · · · · · · ·						
							•	T

Examiner Date Signature Considered

Substitute for form 1449A/PTO

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number. See attached Kinds of U.S. Patent Documents. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

⁺ Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449A/PTO

Publication No.

2003/0064249

Publication No.

2003/0082407

Publication No.

2003/0091798

Publication No.

2003/0096140

PTO/SB/08A (10-96)

Please type a plus sign (+) inside this box

Approved for use through 10/31/99. QMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE +

Complete if Known

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

04-03-2003

05-01-2003

05-15-2003

05-22-2003

	INFO	RMATION DIS	SCLO	SURE	Appl	ication Number	10 601e, 546
	STAT	EMENT BY A	PPLIC	CANT	Filing	g Date	
			•		First	Named Inventor	Bin Lu
·	:	(use as many sheets a	s necessary		Grou	p Art Unit	
	:		· .		Exam	niner Name	
Sheet		3 of 4			Atton	ney Docket Number	SEAG 63332
				_U.S. PATENT DOCU	MENTS		
Examiner Initials	Cite No.		d Code ²	Name of Patentee or Applicate of Cited Document		Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
HOL		Publication No. 2003/0039071		Okuyama et al.		02-27-2003	
		Publication No. 2003/0039863		Chen et al.	· · ·	02-27-2003	
		Publication No. 2003/0059650		Nakagawa et al.	•	03-27-2003	

<u> </u>	· · · · · · · · · · · · · · · · · · ·					FO	REIGN PATE	NT DOCUMENTS	3		
Examiner Cite Initials No.		Foreign Paten		1			of Patentee or . f Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	76	
		Office ³	Number		ind Code ⁵ (if known)	<u> </u>			, and go !	riguies Appeni	'
					1						
		:		· .							1
_	,					· · · · · · · · · · · · · · · · · · ·			*. · · · · · · · · · · · · · · · · · · ·		

		<u> </u>	•		•
Examiner Signature			Date Considered	125/0	4
	-, -, -, -, -, -, -, -, -, -, -, -, -, -				/

Uwazumi et al.

Sakawaki et al.

Tomiyaşu et al.

Zheng et al.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number. ³See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁴Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/08A (10-96)

Please type a plus sign (+) inside this box H Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE +

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

		· · · · · · · · · · · · · · · · · · ·		·	 	
Substitute for fe			·	A		mplete if Known
II.	NFO	RMATION DISCLO	OSURE	Appli	cation Number	10/1006, 546
Ş	TAT	TEMENT BY APPL	ICANT	Filing	g Date	
. •	-			First	Named Inventor	Bin Lu
		(use as many sheets as necess	ary)	. Group	o Art Unit	:
			•	Exam	iner Name	
Sheet		4 of 4	-	Atton	ney Docket Number	SEAG 63332
· · · · · · · · · · · · · · · · · · ·				<u> </u>		
· · · · · · · · · · · · · · · · · · ·	-		U.S. PATENT DOCU	MENTS	 	
Examiner Initials	Cite No.'	U.S. Patent Document	Name of Patentee or Applica of Cited Document	•	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant
•		Number Kind Code ² (if known)				Figures Appear
Ha		Publication No. 2003/0099866	Takahashi et al.		05-29-2003	
HM		Publication No. 2003/0104250	Shimizu et al.	 	06-05-2003	
	 -	2003/010/230				
				· ·		
·			· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
<u> </u>	··					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
				:	 	
	_ :				·	
						
<u> </u>	l			·		
			FOREIGN PATENT DOC	UMENTS		
	Cite No.'	Foreign Patent Document	Name of Patentee Applicant of Cited Do		Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office Number Kind Code				
- :				·		
<u></u>			<u> </u>			
 	T .	11/1		 -		
Examiner Signature		Hill			Date Considered	8/25/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number. "See attached Kinds of U.S. Patent Documents." Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE +

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute f	for form 14	I49A/PTO	•	C	omplete if Known	
	INF	ORMATION DISC	LOSURE	Application Number	10/1006,546	
	STA	TEMENT BY APP	LICANT	Filing Date		
			· · · · · · · · · · · · · · · · · · ·	First Named Inventor	Bin Lu	
	·	(use as many sheets as nec	essary)	Group Art Unit		
				Examiner Name		
Sheet		1 of 4		Attorney Docket Number		
· · · · · · · · · · · · · · · · · · ·	· · ·	· · · · · · · · · · · · · · · · · · ·	U.S. PATENT DOCU	MENTS		
Examiner	Cite	U.S. Patent Document	Name of Patentee or Applica		Pages, Columns, Lines,	
Initials	No.		of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant	
		Number Kind Coo	·		Figures Appear	
_ +tal	_	4,568,599	Ono et al.	02-04-1986		
		4,749,628	Ahlert et al.	06-07-1988		
		4,792,486	Ishizaka et al.	12-20-1988		
		4,966,821	Kawashima et al.	10-30-1990		
		5,429,855	Kotani et al.	07-04-1995		
		5,942,342	Hikosaka et al.	08-24-1999		
		6,083,599	Hirayama et al.	07-04-2000		
		6,183,893	Futamoto et al.	02-06-2001		
		6,372,330	Do et al.	04-16-2002		
		6,395,413	Ando	05-28-2002		
		6,506,508	Yoshida et al.	01-14-2003		
		6,511,761	Tanahashi et al.	01-28-2003		
W	<u> </u>	Publication No. 2001/0008716	Matsuda et al.	07-19-2001		
	· · · [FOREIGN PATENT DOC	UMENTS	Pages, Columns, Lines,	
Examiner Initials	Cite No.1	Foreign Patent Document	Name of Patentee Applicant of Cited Do		Where Relevant Passages or Relevant Figures Appear	
		Office ³ Number ⁴ Kind Co- (if kno-	de ⁵			

Examiner Signature H: White Considered 8/25/09

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number. See attached Kinds of U.S. Patent Documents. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/08B (10-96)

Please type a plus sign (+) inside this box Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for fo	rm 1449B	B/PTO			•				Complete if Known						
II	VFO	RMAT	ION	DISC	LOS	URE			Applic	ation Num	ber .	10/4	206	54	6
S	TAT	EMEN	T B	Y APP	LIÇ	ANT			Filing l	Date	,				
,	•			.·	•				First N	amed Inve	ntor	Bin Lu			
·		(use as m	any sheets as t	iecessary))			Group	Art Unit	· ·		· · · · · · ·		
					•			· 	Examin	ner Name			•		
Sheet	1		of	1				· · ·	Attorne	y Docket I	Number	SEAG	63332	•	
Examiner Initials	Cite No.'	Include nan symposium	ne of the	author (in CA etc.), date, pa	PITAL LI	ETTERS), titl ume-issue nu	e of the artic	le (when appr lisher, city an	opriate), title	of the item (book, maga ned.	zine, journal, seri	al, T ²		
M			YAMADA ET AL., "Large Magnetic Anisotropy in Co ₃ Pt Ordered Phase Thin Films," at. Res. Soc. Symp. Proc., Vol. 517, 1998, pp. 299-310.											• • • •	
All		CoPtCr	KUBOTA ET AL., "Intergrain Magnetic Coupling and Microstructure in CoPtCr, oPtCrTa, and CoPtCrB Alloys," <i>Journal of Applied Physics</i> , Vol. 84, No. 11, December 1998, pp. 6202-6207.												
M			D. WELLER ET AL., "High K. Materials Approach to 100 Gbits/in ² ," <i>IEEE Transactions in Magnetics</i> , Vol. 36, No. 1, January 2000, pp. 10-15.												
M		B. LU E Applied	ET AL Phys	, "Study ics, Vol. !	of Sta 91, No	cking Fa	ults in C y 15, 20	Co-Alloy 02, pp. 8	Perpend 025-802	icular Me 7.	edia," J	ournal of			
												· · · · · · · · · · · · · · · · · · ·			
														•	
	-		 	· ·		:		· · · · · · · · · · · · · · · · · · ·			• •				:
		:		·	· ·		· .	<u>·</u>	·		<u>.</u>				
	<u></u>		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · ·	· · ·	· .	-	·		· ·			 	· 	
			·		· 	·	•		·		·			·	
			····	 			· · · · · · · · · · · · · · · · · · ·		· ·						
						· · ·		· ·	··		· 				
	-	;				- (<u></u>		er Cere			-	<u> </u>	
		. ~	· .:	, -		·	·			• •		· · · · · · · · · · · · · · · · · · ·		. 	
Examiner Signature		4.11	1				· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·		Date Considered	8/2	5/0	9

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Tradermark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/08A (10-96)

Please type a plus sign (+) inside this box Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE + Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of info number

Substitute								ļ <u>.</u>	Cc	mplete if Known	
	IN	FO	RMA	TIO	N DIS	CL(DSURE	App	olication Number	10/606,546	
	ST	ΑŢ	EME	NT]	BY AP	PLI	CANT	Fili	ng Date	06/26/03	
								Firs	t Named Inventor	Bin Lu	
				(use as m	any sheets as i	necessau	ry)	Gro	up Art Unit		
			···					Exa	miner Name		•
heet		1 of 1			Atto	mey Docket Number	SEAG 63332				
						**	ILS. PATENT DOC	IMENT	c		
miner ials		itc o.¹					V.S. PATENT DOCUME Name of Patentee or Applicant of Cited Document		Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Li Where Relevant Passages or Releva	
			Number		Kind ((if kn					Figures App	реаг
N			Applic 10/447		No.		Lu et al.		Filed 05-29-2003		
		•				_					· · · · · · · · · · · · · · · · · · ·
71	-										
			*								
							FOREIGN PATENT DOC	UMENTS			
	Cite No. ¹	No. ¹ Office ³ Number ⁴ Kind Code ⁵					Name of Patentee or Applicant of Cited Documen		Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T°
					(if kn	-					-
T											

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number. 2See attached Kinds of U.S. Patent Documents. 2Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WiPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

⁺ Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.